ONE HUNDRED FIFTEENTH CONGRESS

Congress of the United States

House of Representatives

COMMITTEE ON ENERGY AND COMMERCE

2125 RAYBURN HOUSE OFFICE BUILDING WASHINGTON, DC 20515-6115

Majority (202) 225-2927 Minority (202) 225-3641

January 12, 2018

Mr. Tim Cook Chief Executive Officer Apple Inc. One Infinite Loop Cupertino, CA 95014

Dear Mr. Cook:

Recent media reports indicate that users of select Apple iPhone models have experienced diminished processor performance following the installation of software updates to the iPhone's operating system (iOS). The diminution in processor performance has allegedly resulted in an overall slowdown of the iPhone's operations for these users. The Committee appreciates Apple's willingness to provide Committee staff with an initial briefing on this issue.

In December 2017, Apple acknowledged that it does, in fact, throttle processor speeds for select iPhone models, but only when needed to prevent an instantaneous shutdown attributable to a phone's reduced battery capacity. Reports also suggest that the degree of processor throttling is not uniform, but rather varies depending on a battery's condition. Apple maintains that the forced processor performance throttling is limited to its iPhone 6, iPhone 6s, iPhone 7, and iPhone SE models. It remains unclear whether Apple provided consumers with adequate notice of the potential for a reduction in phone performance associated with an iOS update and what options consumers have, if any, to opt out of the throttling feature. It also remains unclear whether Apple plans to incorporate processor performance throttling in future iOS updates.

¹ See, e.g., Is Apple Slowing Down Old iPhones? Questions and Answers, N.Y. TIMES, Dec. 21, 2017, available at https://nyti.ms/2DqKdTY.

² Apple confirms iPhones with older batteries will take hits in performance, The Verge, Dec. 20, 2017 available at https://www.theverge.com/2017/12/20/16800058/apple-iphone-slow-fix-battery-life-capacity.

³ Apple response to reports of worn batteries forcing iPhone CPU slowdowns, AppleInsider, Dec. 20, 2017 available at http://appleinsider.com/articles/17/12/20/apple-responds-to-reports-of-worn-battery-forcing-iphone-cpu-slowdown.

⁴ The Verge, supra note 2.

In response to concerns over the belated disclosure of its performance-limiting software feature, Apple announced that it would offer battery replacements for out-of-warranty iPhones at a reduced cost and would be issuing an iOS update in early 2018 that will provide users with greater information on their iPhone's battery performance.⁵ However, Apple has indicated to the Committee that, thus far, it is unable to ascertain whether it has taken the necessary steps to ensure that affected consumers will be able to obtain a replacement battery in a timely manner. Apple has also indicated that it has yet to develop policies to protect consumers should it fail to develop alternative methods to prevent instantaneous iPhone shutdowns, other than limiting processor performance, by the time the term of its reduced-cost battery replacement program expires at the end of 2018.

The Committee is also concerned over recent media reports which detailed that an iPhone battery overheated and began to emit smoke while the phone was undergoing repair in a Zurich, Switzerland Apple store, resulting in the store's evacuation and seven people receiving medical treatment.⁶ In light of the recently announced battery replacement program, the Committee is concerned with ensuring the integrity of iPhone batteries, which Committee staff raised to Apple.

Pursuant to Rule X of the U.S. House of Representatives, the Committee on Energy and Commerce has jurisdiction over matters affecting telecommunications policy and consumer protection. We have a number of follow-up questions pertaining to Apple's decision to throttle the processing speed for certain iPhone models as well as the company's consumer protection policies. Therefore, we request you provide the Committee with the following information as well as a briefing with subject matter experts on these issues no later than January 26, 2018:

- 1. When and how did Apple first become aware of the need to develop an iOS software update to address instantaneous phone shutdowns attributable to battery degradation? When did Apple begin throttling iPhone processor performance through iOS software updates?
- 2. Prior to installation of an iOS software update, does Apple inform users of the potential for a reduction in processor performance associated with the update? If no, why not?
- 3. What steps, if any, is Apple taking to address potential security concerns that could develop if consumers become wary of iOS software updates that could reduce processor performance, and delay or fail to update as a result?
- 4. Does Apple utilize processor performance throttling for iPhone models that predate the iPhone 6? If so, please list the models. If no, why not?
- 5. Does Apple currently utilize processor performance throttling for iPhone 8 and iPhone X models that are operating with reduced battery capacities? If no, why not?

⁵ Apple Inc., A Message to Our Customers about iPhone Batteries and Performance, Dec. 28, 2017 available at https://www.apple.com/iphone-battery-and-performance/.

⁶ Apple store in Zurich evacuated as phone battery overheats, Reuters, Jan. 9, 2018 available at http://news.trust.org/item/20180109130122-tsylw.

- 6. Aside from replacing the battery, what alternatives, if any, are available to consumers whose iPhones may have their processor speeds throttled attributable to an iOS update? In the event there are alternatives for these consumers, how does Apple communicate them?
- 7. What battery-related information will be provided to consumers in the forthcoming iOS update, referenced in Apple's December 28, 2017 statement? How will this information be provided? When does Apple anticipate releasing this update?
- 8. Has Apple attempted to prevent battery-induced instantaneous iPhone shutdowns through means other than processor throttling through iOS updates? If so, please identify all alternative methods Apple has explored. If no, why not?
- 9. Does Apple have a team dedicated to addressing battery-induced instantaneous iPhone shutdowns? If so, how many full-time employees are assigned to this issue?
- 10. Aside from processor throttling, please describe the actions, if any, Apple is taking to remedy instantaneous iPhone shutdowns attributable to degraded batteries;
- 11. How many customers are eligible to take advantage of its reduced-cost battery replacement offer, and how many does Apple anticipate will do so? Does Apple believe it will have a sufficient supply of replacement batteries to meet this demand?
- 12. Why did Apple choose to end the reduced cost replacement program for out-of-warranty iPhone batteries in December 2018?
- 13. If Apple does not develop a method to prevent instantaneous iPhone shutdowns other than processor throttling by the end of 2018, will it consider extending the term of its reduced cost replacement battery program?

If you have any questions about this letter, please contact Christopher Santini or Jessica Wilkerson of the Majority Committee staff at 202-225-2927. Thank you for your prompt attention to this matter.

Sincerely,

Greg Walden Chairman Marsha Blackburn

Chairman

Subcommittee on Communications and Technology

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Robert E. Latta

Chairman

Subcommittee on Digital Commerce

and Consumer Protection

Chairman

Subcommittee on Oversight

and Investigations

cc:

The Honorable Frank Pallone, Jr., Ranking Member

The Honorable Diana DeGette, Ranking Member Subcommittee on Oversight and Investigations

The Honorable Michael F. Doyle, Ranking Member Subcommittee on Communications and Technology

The Honorable Janice D. Schakowsky, Ranking Member Subcommittee on Digital Commerce and Consumer Protection